SLIP

FROM	DATE
PHD/IEG	6 July 71

TO		INITIALS	DATE
DIRECTOR			
DEP/DIRECTOR			
EXEC/DIRECTOR			
SPECIAL ASST			
ASST TO DIR			
HISTORIAN			
CH/PPBS			
DEP CH/PPBS			
EXO/PPBS			
CH/SS			
DEP CH/SS			
SC & P			
RECORDS MGT			
PERSONNEL			
LOGISTICS			
TRAINING			
SECURITY			
FINANCE			
COMMO			
CH/IEG			
DEP CH/IEG			
EXO/IEG			
CH/PSG			
DEP CH PSG			
EXO PSG			
CH/TSG RED/TB			
DEP CH/TSG			
EXO/TSG			
DIR/IAS/DDI			
CH/DC-2			
CH/DI-8			
CH/SPAD			

REMARKS

Vincent
Info to Boeing for Design Guide?

R

Rm 4N414

IEG/PHD-103-71
6 July 1971

MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report to [redacted] 25X1

1. On 30 June through 2 July [redacted] accompanied 25X1
[redacted] 25X1
[redacted] 25X1
[redacted] The purpose of the trip was for the pre-acceptance 25X1
testing of the [redacted] Stereo Comparator. 25X1

2. The major emphasis of our pre-acceptance testing was put on the optics, even though we were told that the final calibration and adjustment of the optics had not been completed, the convergence angle had not been set, or the 12 micrometer reticle was not placed in the optical train. Knowing that these had to be done, we still got fairly good results. The resolution checked out at approximately 575 lines per millimeter. The specifications require 600 lines per millimeter. One other item in the optical package that didn't quite meet the specifications was the field of view. These two items will be brought up to specs in the final adjustment. The testing of the optics with color emulsions proved very favorable. The minus density filters appeared to be of wide enough ranges that various effects could be obtained with the changing of filters. My major contribution was made in matters concerning the reticle. The [redacted] people were 25X1
quite concerned with the reticle because they felt that the reticle was too small to be seen. This was very true if the reticle was placed on a variable zoom microscope with surface illumination, in the optical lab. All indications, in the lab test was that a 20 to 30 micrometer reticle would be more desirable. I had several proposals presented to me concerning what could be done with the reticle, e.g., flag the reticle with some type of indicator, or negotiate a contract for a new reticle of larger size. I recommended that the 12 micrometer reticle should be inserted into one leg of the optical train to see if the reticle would be identifiable over a piece of imagery. This was done on the last day. With one of the reticles in the instrument and with 10X eyepieces the reticle can be seen. It is amazing this reticle is so minute that it is very difficult to find, but once you get used to it is very apparent. I think it will prove very good for mensuration purposes. With the 6X eyepieces this reticle is not suitable for use. My recommendations to the [redacted] people was to install both reticles, calibrate the optics, 25X1
and set the convergence angle and ship the instrument. We will then test these reticles under operational conditions with various photogrammetrists. From this testing we will get a better feel for whether or not we (NPIC/PHD) would want to negotiate for a new set

SUBJECT: Trip Report to [redacted] 25X1

of reticles.

3. The "stiff-stick" joy-stick that has been developed for this instrument is a positive plus. I think that the photogrammetrist will surely be pleased with this device. In general, I found the instrument esthetically pleasing, and mechanically very favorable. I think that PHD will be very satisfied with this instrument.

4. [redacted] is planning on the 1740A to be packed and crated on 9 July and shipped on the 12th. 25X1

[redacted] 25X1

Distribution:
Orig. - Record
1 - NPIC/IEG
1 - NPIC/TSG/RED/ATB
2 - NPIC/IEG/OD
1 - NPIC/IEG/PHD